

REMARKS

Claims 1-6 are pending. By this Amendment, claim 1 is amended. No new matter is added. Reconsideration in view of the foregoing amendments and the following remarks is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments correct indefiniteness as raised by the Office Action; (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

Applicants note with appreciation the indication of allowable subject matter in claims 1-5. Because the §112 rejection is overcome as discussed below, Applicants respectfully understand that claims 1-5 are allowed.

The Office Action rejects claims 1-5 under 35 U.S.C. §112, second paragraph. Claim 1 is amended to obviate the rejection, without changing the scope of the claim. Therefore, the amendments are non-narrowing and do not affect the patentability of claim 1. Claims 2-5 depend from claim 1. As such, withdrawal of the rejection is respectfully requested.

The Office Action rejects claim 6 under 35 U.S.C. §102(b) over U.S. Patent No. 4,630,226 to Tanaka; EPO Patent Publication No. 0142733 A2 to Takeuchi; GB 2262341 A to Jones, or FR 2692363 A1 to Lachevin. This rejection is respectfully traversed.

Claim 6 recites a conversion section that converts into an electrical signal level, a time difference determined by subtracting a lag time of an electrical circuit from a time difference

between the transmission time at which the transmission wave is transmitted and a receiving time at which the received wave is received.

Tanaka teaches in the abstract to correct a distance value or a measured elapsed time value on a correction value derived on the basis of the rate of change of the signal level of a receiver signal outputted by an ultrasonic receiver. As described at col. 5, lines 19-21, the correction value is dependent upon the peak-value-indicative signal value. As shown in Fig. 9 and described at col. 7, lines 30-35, the correction value Δt is subtracted from the latched value. Therefore, Tanaka does not teach or suggest a time difference determined subtracting a lag time of an electrical circuit from a time difference between the transmission time at which the transmission wave is transmitted and a receiving time at which the received wave is received, as recited in claim 6.

Takeuchi teaches in the abstract that the distance calculation is based on the time which elapses after transmission of the ultrasonic wave until the rate of change of the envelope of the received ultrasonic wave signal exceeds a prescribed value to prevent erroneous measurement. Takeuchi does not consider a time difference determined by subtracting the lag time of electrical circuit from a time difference between the transmission time at which the transmission wave is transmitted and a receiving time at which the received wave is received. Thus, Takeuchi does not teach or suggest features recited in claim 6.

Similar to the above, Jones does not consider the use of a lag time of the electrical circuit and thus does not teach or suggest a time difference determined by subtracting the lag time of the electrical circuit from a time difference between the transmission time and a receiving time, as recited in claim 6.

As described in the Abstract, Lechevin does not consider the use of the lag time of electrical circuit either. Thus, Lechevin does not teach or suggest a time difference

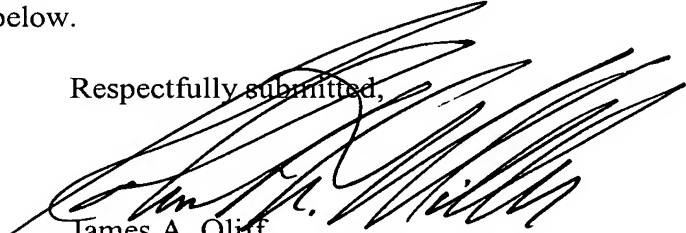
determined by subtracting a lag time of an electrical circuit from a time difference between the transmission time and a receiving time, as recited in claim 6.

At least for these reasons, Applicants respectfully submit that claim 6 is patentably distinct from the applied art. As such, withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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